



Massachusetts Department of Environmental Protection
Source Water Assessment and Protection (SWAP) Report
for
Reading Water Division

What is SWAP?

The Source Water Assessment Program (SWAP), established under the federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- assess the susceptibility of drinking water sources to contamination from these land uses; and
- publicize the results to provide support for improved protection.

Susceptibility and Water Quality

Susceptibility is a measure of a water supply's potential to become contaminated due to land uses and activities within its recharge area.

A source's susceptibility to contamination does *not* imply poor water quality.

Water suppliers protect drinking water by monitoring for more than 100 chemicals, disinfecting, filtering, or treating water supplies, and using source protection measures to ensure that safe water is delivered to the tap.

Actual water quality is best reflected by the results of regular water tests. To learn more about your water quality, refer to your water supplier's annual Consumer Confidence Reports.

Table 1: Public Water System Information

<i>PWS Name</i>	Reading Water Division
<i>PWS Address</i>	Town Hall/16 Lowell Street
<i>City/Town</i>	Reading, Massachusetts 01867-2648
<i>PWS ID Number</i>	3246000
<i>Local Contact</i>	Edward D. McIntire – DPW Director
<i>Phone Number</i>	(781) 942-9077

Introduction

We are all concerned about the quality of the water we drink. Drinking water wells may be threatened by many potential contaminant sources, including storm runoff, road salting, and improper disposal of hazardous materials. Citizens and local officials can work together to better protect these drinking water sources.

Purpose of this report:

This report is a planning tool to support local and state efforts to improve water supply protection. By identifying land uses within water supply protection areas that may be potential sources of contamination, the assessment helps focus protection efforts on appropriate best management practices (BMPs) and drinking water source protection measures.

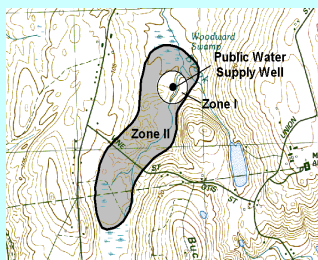
Refer to Table 3 for Recommendations to address potential sources of contamination. Department of Environmental Protection (DEP) staff are available to provide information about funding and other resources that may be available to your community.

This report includes the following sections:

1. Description of the Water System
2. Land Uses within Protection Areas
3. Source Water Protection Conclusions and Recommendations
4. Appendices

What is a Protection Area?

A well's water supply protection area is the land around the well where protection activities should be focused. Each well has a Zone I protective radius and a Zone II protection area.



Section 1: Description of the Water System

Zone II #: 318

Susceptibility: High

<i>Well Names</i>	<i>Source IDs</i>
Revay Well #1	3246000-03G
Well #2	3246000-04G
Well #3	3246000-05G
B-Line Well	3246000-06G
Town Forest	3246000-07G
Well #82-20	3246000-08G
Well #66-8	3246000-09G
Well #13	3246000-10G
Well #15	3246000-11G

The wells for the Reading Water Division are located within a single water supply protection area, with portions extending into the towns of North Reading and Wilmington. Each well has a Zone I radius of 400 feet. The wells are located in an aquifer with a high vulnerability to contamination due to the absence of hydrogeologic barriers (i.e. clay) that can prevent contaminant migration. Please refer to the attached map of the Zone II.

Glossary

Aquifer: An underground water-bearing layer of permeable material that will yield water in a usable quantity to a well.

Hydrogeologic Barrier: An underground layer of impermeable material (i.e. clay) that resists penetration by water.

Recharge Area: The surface area that contributes water to a well.

Zone I: The area closest to a well; a 100 to 400 foot radius proportional to the well's pumping rate. This area should be owned or controlled by the water supplier and limited to water supply activities.

Zone II: The primary recharge area for the aquifer. This area is defined by hydrogeologic studies that must be approved by DEP. Refer to the attached map to determine the land within your Zone II.

For current information on monitoring results and treatment, please contact the Public Water System contact person listed above in Table 1 for a copy of the most recent Consumer Confidence Report. Drinking water monitoring reporting data is also available on the web at <http://www.epa.gov/safewater/ccr1.html>

Section 2: Land Uses in the Protection Areas

The Zone II for Reading is a mixture primarily of forest, wetlands, and residential land uses, with a small portion consisting of transportation, commercial, and industrial (refer to attached map for details). Land uses and activities that are potential sources of contamination are listed in Table 2, with further detail provided in the Table of Regulated Facilities and Table of Underground Storage Tanks in Appendix B.

Key Land Uses and Protection Issues include:

1. Activities in Zone I
2. Hazardous Materials Storage and Use
3. Road and Maintenance Depot
4. Golf Course
5. Residential Land Uses
6. Transportation Corridors
7. Oil or Hazardous Material Contamination Sites
8. Comprehensive Wellhead Protection Planning

The overall ranking of susceptibility to contamination for the system is high, based on the presence of at least one high threat land use within the water supply protection area, as seen in Table 2.

1. Activities in Zone I – The Zone I for each well is a 400 foot radius around the wellhead. Massachusetts drinking water regulations (310 CMR 22.00 Drinking Water) requires public water suppliers to own the Zone I, or control the Zone I through a conservation restriction. Only water supply activities are allowed in the Zone I. However, many public water supplies were developed prior to the Department's regulations and contain non-water supply activities such as public roads. The following non-water supply activities occur in the Zone I of some of the system's wells:

Well #15 and Well #13 – Route 93 runs through the west side of the Zone I of both wells.

Zone I Recommendations:

- ✓ Coordinate efforts with the Massachusetts Highway Department to design a containment structure on catch basins so as to prevent future spills from entering the wetlands adjacent to the wells, thereby reducing the risk of contamination.
- ✓ Pursue the previous request to the Massachusetts Highway Department for the purpose of creating a “low salt area” on the portion of Route 93 that cuts through the Zone I.

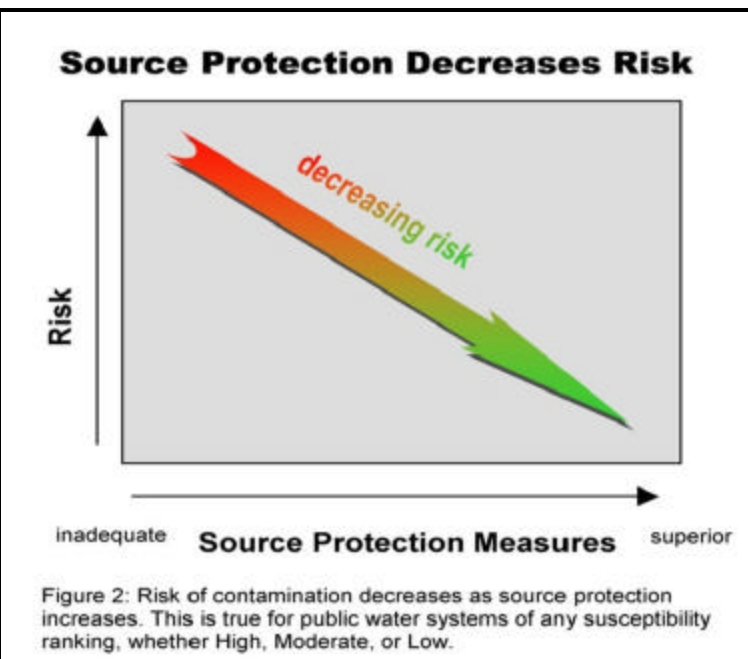
- ✓ Do not use pesticides, fertilizers or road salt within the Zone I.
- ✓ Keep any new non-water supply activities out of the Zone I.

2. Hazardous Materials Storage and Use – Many businesses and industries use hazardous materials, produce hazardous waste products, and/or store large quantities of hazardous materials in Underground Storage Tanks (USTs) and/or Aboveground Storage Tanks (ASTs). If hazardous materials are improperly stored, used, or disposed, they

become potential sources of contamination. Hazardous materials should never be disposed of to a septic system or floor drain leading directly to the ground.

Hazardous Materials Storage and Use Recommendations:

- ✓ Coordinate efforts with the Town's of North Reading and Wilmington to educate local businesses on best management practices for protecting water supplies. Distribute the fact sheet “Businesses Protect Drinking Water” available on www.mass.gov/dep/brp/dws/protect.htm, which provides BMP's for common business issues.
- ✓ Work with local businesses to register those facilities that are unregistered generators of hazardous waste or waste oil. Partnerships between businesses, water suppliers, and communities enhance successful public drinking water protection practices.



- ✓ Educate local businesses on Massachusetts floor drain requirements. See brochure “Industrial Floor Drains” for more information.

3. Road and Maintenance Depot - The potential for ground water contamination at depots is related to accidental dumps, accidental spills, and vehicle washing operations, or from wastewater treatment or leftover product. Waste management and product storage processes pose the most prevalent threats to ground water, and a wide variety of potentially harmful constituents are involved in release incidents.

Road and Maintenance Depot Recommendations:

- ✓ **Best Management Practices** - The New England Environmental Assistance Team provides municipalities in New England with information on how to comply with environmental requirements, and how to prevent pollution. For more information about this EPA sponsored program visit their website at <http://www.epa.gov/region1/steward/neeat/muni/index.html>.

4. Golf Course Activities – Pesticides and fertilizers have the potential to contaminate a drinking water source if improperly stored, applied, or disposed. If managed improperly, Underground and Aboveground Storage Tanks (USTs and ASTs) can be potential sources of contamination due to leaks or spills of the fuel oil they store.

Golf Courses Recommendations:

- ✓ Encourage the golf course grounds manager to incorporate an **Integrated Pest Management (IPM)** approach into their grounds maintenance program. IPM is an ecologically-based approach to pest control that links together several related components, including monitoring and scouting, biological controls, mechanical and/or other cultural practices, and pesticide applications. By combining a number of these different methods and practices, satisfactory pest control can be achieved with less impact on the environment.

- ✓ Promote **Best Management Practices (BMPs)** for fuel oil storage, hazardous material handling, storage, disposal, and emergency response planning.
- ✓ Work with golf courses to ensure that pesticides and fertilizers are being stored within a structure designed to prevent runoff.

5. Residential Land Uses – Approximately 17% of the Zone II consists of residential use. If managed improperly, activities associated with residential areas can contribute to drinking water contamination. Common potential sources of contamination include:

- **Septic Systems** – Improper disposal of household hazardous chemicals to septic systems is a potential source of contamination to the groundwater because septic systems lead to the ground. If septic systems fail or are not properly maintained they could be a potential source of microbial contamination.
- **Household Hazardous Materials** - Hazardous materials may include automotive wastes, paints, solvents, pesticides, fertilizers, and other substances. Improper use, storage, and disposal of chemical products used in homes are potential sources of contamination.
- **Heating Oil Storage** - If managed improperly, Underground and Aboveground Storage Tanks (UST and AST) can be potential sources of contamination due to leaks or spills of the fuel oil they store.
- **Storm water** – Catch basins transport storm water from roadways and adjacent properties to the ground. As flowing storm water travels, it picks up debris and contaminants from streets and lawns. Common potential contaminants include lawn chemicals, pet waste, and contaminants from automotive leaks, maintenance, washing, or accidents.

(Continued on page 6)

Benefits of Source Protection

Source Protection helps protect public health and is also good for fiscal fitness:

- Protects drinking water quality at the source
- Reduces monitoring costs through the DEP Waiver Program
- Treatment can be reduced or avoided entirely, saving treatment costs
- Prevents costly contamination clean-up
- Preventing contamination saves costs on water purchases, and expensive new source development

Contact your regional DEP office for more information on Source Protection and the Waiver Program.

What are "BMPs?"

Best Management Practices (BMPs) are measures that are used to protect and improve surface water and groundwater quality. BMPs can be structural, such as oil & grease trap catch basins, nonstructural, such as hazardous waste collection days or managerial, such as employee training on proper disposal procedures.

Potential Source of Contamination vs. Actual Contamination

The activities listed in Table 2 are those that typically use, produce, or store contaminants of concern, which, if managed improperly, are potential sources of contamination (PSC).

It is important to understand that a release may never occur from the potential source of contamination provided facilities are using best management practices (BMPs). If BMPs are in place, the actual risk may be lower than the threat ranking identified in Table 2. Many potential sources of contamination are regulated at the federal, state and/or local levels, to further reduce the risk.

Table 2: Land Use in the Protection Areas (Zones I and II)

For more information, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area

Activities	Quantity	Threat*	Zone II ID#	Potential Source of Contamination*
Commercial				
Bus and Truck Terminals	6	H	318	Spills, leaks, or improper handling of fuels and maintenance chemicals
Golf Courses	1	M	318	Over-application or improper handling of fertilizers or pesticides
Railroad Tracks and Yards	1	H	318	Herbicides: over-application or improper handling; fuel storage, transported chemicals, and maintenance chemicals: leaks or spills
Fuel Oil Storage (at residences)	Numerous	M	318	Fuel oil: spills, leaks, or improper handling
Lawn Care/ Gardening	Numerous	M	318	Pesticides: over-application or improper storage and disposal
Septic Systems/ Cesspools	Several	M	318	Microbial contaminants, and improper disposal of hazardous chemicals
Miscellaneous				
Aboveground Storage Tanks	2	M	318	Materials stored in tanks: spills, leaks, or improper handling
Composting Facilities	1	L	318	Storage and improper handling of organic material, animal waste, and runoff
Large Quantity Hazardous Waste Generators	5	H	318	Spills, leaks, or improper handling or storage of hazardous materials and waste
NPDES Locations	1	L	318	Improper disposal of hazardous material and wastes
Oil or Hazardous Material Sites	8	----	318	Oil or hazardous materials and waste: spills, leaks, or improper handling or storage
Road and Maintenance Depots	2	M	318	Spills, leaks, or improper handling or storage of de-icing materials, automotive fluids, fuel storage, and other chemicals
Small Quantity Hazardous Waste Generators	7	M	318	Spills, leaks, or improper handling or storage of hazardous materials and waste
Stormwater Drains/ Retention Basins	Numerous/ Several	L	318	Debris, pet waste, and chemicals in stormwater from roads, parking lots, and lawns
Transmission Line Rights-of-Way Type: <u>electric</u>	2	L	318	Construction and corridor maintenance, over-application or improper handling of herbicides

Activities	Quantity	Threat *	Zone II ID#	Potential Source of Contamination*
Miscellaneous				
Transportation Corridors	1	M	318	Accidental leaks or spills of fuels and other hazardous materials, over-application or improper handling of pesticides
Underground Storage Tanks	13	H	318	Spills, leaks, or improper handling of stored materials
Utility Substation Transformers	1	L	318	Spills, leaks, or improper handling of chemicals and other materials including PCBs
Very Small Quantity Hazardous Waste Generators	8	L	318	Hazardous materials and waste: spills, leaks, or improper handling or storage
Waste Treatment Plant	1	M	318	Improper handling or storage of treatment chemicals or equipment maintenance materials; improper management of wastewater
<p>Water Supply Protection Area % that is Sewered = 99.9% in Reading</p> <p>Notes:</p> <ol style="list-style-type: none"> 1. When specific potential contaminants are not known, typical potential contaminants or activities for that type of land use are listed. Facilities within the watershed may not contain all of these potential contaminant sources, may contain other potential contaminant sources, or may use Best Management Practices to prevent contaminants from reaching drinking water supplies. 2. For more information on regulated facilities, refer to Appendix 3: Regulated Facilities within the Water Supply Protection Area information about these potential sources of contamination. 3. For information about Oil or Hazardous Materials Sites in your protection areas, refer to Appendix B: Tier Classified Oil and/or Hazardous Material Sites. <p>THREAT RANKING - The rankings (high, moderate or low) represent the relative threat of each land use compared to other PSCs. The ranking of a particular PSC is based on a number of factors, including: the type and quantity of chemicals typically used or generated by the PSC; the characteristics of the contaminants (such as toxicity, environmental fate and transport); and the behavior and mobility of the pollutants in soils and groundwater.</p>				

Residential Land Use Recommendations:

- ✓ Educate residents on best management practices (BMPs) for protecting water supplies. Distribute the fact sheet “Residents Protect Drinking Water” available on www.mass.gov/dep/brp/dws/protect.htm, which provides BMPs for common residential issues.
- ✓ Work with planners to control new residential developments in the water supply protection areas.
- ✓ Promote BMPs for storm water management and pollution controls.

6. Transportation Corridors - Route 93 and several heavily traveled local roads run throughout the Zone II. Roadway construction, maintenance, and typical highway use can all be potential sources of contamination. Accidents can lead to spills of gasoline and other potentially dangerous transported chemicals. Roadways are frequent sites for illegal dumping of hazardous or other potentially harmful wastes. De-icing salt, automotive chemicals and other debris on roads are picked up by storm water and wash in to catch basins.

Transportation Corridor Recommendations:

- ✓ Identify storm water drains and the drainage system along transportation corridors. Wherever possible, ensure that drains discharge storm water outside of the Zone II.
- ✓ Work with each town and the Massachusetts Highway Department to have catch basins inspected, maintained, and cleaned on a regular schedule. Street sweeping reduces the amount of potential contaminants in runoff.
- ✓ Work with local and State emergency response teams to ensure that any spills within the Zone II can be effectively contained.

Additional Documents:

To help with source protection efforts, more information is available by request or online at mass.gov/dep/brp/dws including:

1. Water Supply Protection Guidance Materials such as model regulations, Best Management Practice information, and general water supply protection information.
2. MA DEP SWAP Strategy
3. Land Use Pollution Potential Matrix
4. Draft Land/Associated Contaminants Matrix

- ✓ If storm drainage maps are available, review the maps with emergency response teams. If maps aren't yet available, work with local officials to investigate mapping options such as those in the upcoming Phase II Storm water Rule requiring some communities to complete storm water mapping.

7. Presence of Oil or Hazardous Material Contamination Sites – The Zone II contains DEP Tier Classified Oil and/or Hazardous Material Release Sites indicated on the map as Release Tracking Numbers 3-0000518, 3-0000625, 3-0000692, 3-0002363, 3-0002584, 3-0002804, 3-0013565 and 3-0017390. Refer to the attached map and Appendix 3 for more information.

Oil or Hazardous Material Contamination Sites Recommendation:

- ✓ Monitor progress on any ongoing remedial action conducted for the known oil or contamination sites.

8. Protection Planning – Protection planning protects drinking water by managing the land area that supplies water to a well. A Wellhead Protection Plan coordinates community efforts, identifies protection strategies, establishes a timeframe for implementation, and provides a forum for public participation. There are resources available to help communities develop a plan for protecting drinking water supply wells.

Protection Planning Recommendations:

- ✓ Update the Wellhead Protection Plan. Establish a protection team, and refer them to <http://mass.gov/dep/brp/dws/protect.htm> for a copy of DEP's guidance, "Developing a Local Wellhead Protection Plan".

Other land uses and activities within the Zone II that may be potential contaminant sources are included in Table 2. Refer to Appendix A for more information about these land uses. Identifying potential sources of contamination is an important initial step in protecting your drinking water sources. Further local investigation will provide more in-depth information and may identify new land uses and activities that are potential sources of contamination. Once potential sources of contamination are identified, specific recommendations like those below should be used to better protect your water supply.

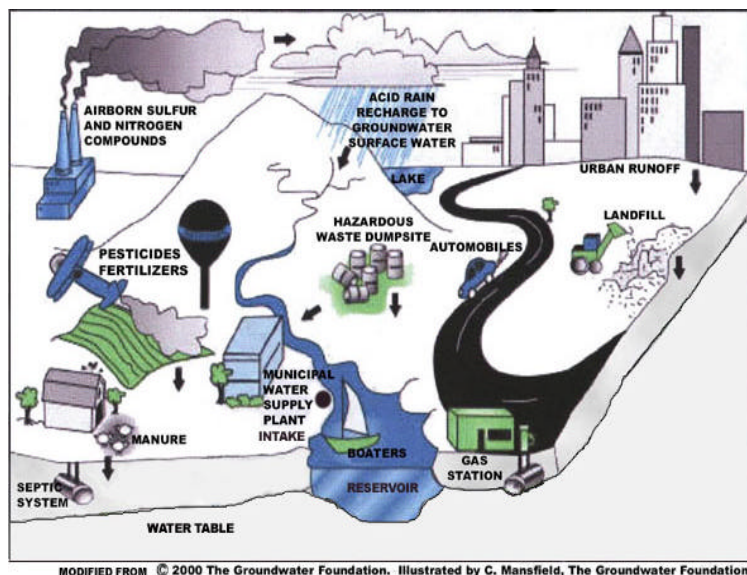


Figure 1: Sample watershed with examples of potential sources of contamination

Section 3: Source Water Protection Conclusions and Recommendations

Current Land Uses and Source Protection:

As with many water supply protection areas, the system Zone IIs contain potential sources of contamination. However, source protection measures reduce the risk of actual contamination, as illustrated in Figure 2. The water supplier and Town are commended for taking an active role in promoting source protection measures in the Water Supply Protection Areas through:

- Requesting funding to hire a consultant to determine options available to contain storm drains adjacent to wells along Route 93 in the event of a spill.
- Holding a Household Hazardous Waste Collection Day two times per year.
- Adopting local land use controls, and pursuing the adoption of a floor drain regulation.
- Participating in the Public Involvement Plan (PIP), which is a citizens' group in North Reading that keeps information about oil and hazardous material contamination sites located in North Reading up to date.
- Controlling land in Reading along the Ipswich River that is located in the Zone II, and purchasing an additional 8.64 acres on Mill Street known as Marion Woods.

Source Protection Recommendations:

To better protect the sources for the future:

- ✓ Continue to inspect the Zone I regularly, and when feasible, remove any non-water supply activities.
- ✓ Educate residents on ways they can help you to protect drinking water sources.
- ✓ Work with emergency response teams to ensure that they are aware of the storm water drainage in your Zone II and to cooperate on responding to spills or accidents.
- ✓ Partner with local businesses to ensure the proper storage, handling, and disposal of hazardous materials.
- ✓ Monitor progress on any ongoing remedial action conducted for the known oil or contamination sites.
- ✓ Update Wellhead Protection Plan.

Resources for Drinking Water Source Protection:

These recommendations are only part of your ongoing local drinking water source protection. Additional source protection recommendations are listed in Table 3, the Key Issues above and Appendix A.

DEP staff, informational documents, and resources are available to help you build on this SWAP report as you continue to improve drinking water protection in your community. The Department's Wellhead Protection Grant Program and Source Protection Grant Program provide funds to assist public water suppliers in addressing water supply source protection through local projects. Protection recommendations discussed in this document may be eligible for funding under the Grant Program. Please note: each spring DEP posts a new Request for Response for the grant program (RFR).

Other grants and loans are available through the Drinking Water State Revolving Loan Fund, the Clean Water State Revolving Fund, and other sources. For more information on grants and loans, visit the Bureau of Resource Protection's Municipal Services web site at: <http://mass.gov/dep/brp/mf/mfpubs.htm>.

Conclusions:

The assessment and protection recommendations in this SWAP report are provided as a tool to encourage community discussion, support ongoing source protection efforts, and help set local drinking water protection priorities. Citizens and community officials should use this SWAP report to spur discussion of local drinking water protection measures. The water supplier should supplement this SWAP report with local information on potential sources of contamination and land uses. Local information should be maintained and updated periodically to reflect land use changes in the Zone II. Use this information to set priorities, target inspections, focus education efforts, and to develop a long-term drinking water source protection plan.

What is a Zone III?

A Zone III (the secondary recharge area) is the land beyond the Zone II from which surface and ground water drain to the Zone II and is often coincident with a watershed boundary.

The Zone III is defined as a secondary recharge area for one or both of the following reasons:

1. The low permeability of underground water bearing materials in this area significantly reduces the rate of groundwater and potential contaminant flow into the Zone II.
2. The groundwater in this area discharges to a surface water feature such as a river, rather than discharging directly into the aquifer.

The land uses within the Zone III are assessed only for sources that are shown to be groundwater under the direct influence of surface water.

Table 3: Current Protection and Recommendations

Protection Measures	Status	Recommendations
Zone I		
Does the Public Water Supplier (PWS) own or control the entire Zone I?	YES (for all except Well #13 and Well #15)	Follow Best Management Practices (BMP's) that focus on good housekeeping, spill prevention, and operational practices to reduce the use and release of hazardous materials.
	NO (Well #13 and Well #15)	Monitor non-water supply activities in Zone I, and investigate options for reducing the risk of contamination from these activities.
Is the Zone I posted with "Public Drinking Water Supply" Signs?	YES	Additional economical signs are available from the Northeast Rural Water Association (802) 660-4988.
Is Zone I regularly inspected?	YES	Continue daily inspections of drinking water protection areas. Pay special attention to fenced areas, lighting, and signs of forced entry into well houses and pump stations.
Are water supply-related activities the only activities within the Zone I?	YES (for all except Well #13 and Well #15)	Continue monitoring for non-water supply activities in Zone Is.
	NO (Well #13 and Well #15)	Monitor non-water supply activities in Zone I, and investigate options for removing these activities, or reducing the risk of contamination from these activities.
Municipal Controls (Zoning Bylaws, Health Regulations, and General Bylaws)		
Does the municipality have Wellhead Protection Controls that meet 310 CMR 22.21(2)?	YES	Work with the Board of Health, Planning Board and Board of Selectmen to review the existing source protection bylaw to determine if it meets land use controls required by 310 CMR 22.21(2), and to adopt a floor drain regulation. Refer to www.state.ma.us/dep/brp/dws/ for model bylaws and health regulations, and current regulations.
Do neighboring communities protect the Zone II areas extending into their communities?	SOME	Work with the town of Wilmington to include Reading's Zone II in Wilmington's wellhead protection controls.
Planning		
Does the PWS have a Wellhead Protection Plan?	YES	Update wellhead protection plan. Follow "Developing a Local Wellhead Protection Plan" available at: www.state.ma.us/dep/brp/dws/ .
Does the PWS have a formal "Emergency Response Plan" to deal with spills or other emergencies?	YES	Supplement plan by developing a joint emergency response plan with fire department, Board of Health, DPW, and local and state emergency officials. Coordinate emergency response drills with local teams.
Does the municipality have a wellhead protection committee?	PARTIAL	Currently, there is a water & sewer advisory committee. To have a well rounded committee, include representatives from citizens' groups, neighboring communities, and the business community.
Does the Board of Health conduct inspections of commercial and industrial activities?	YES	Inspections of facilities have been done for hazardous materials. Coordinate efforts with the Board of Health and Fire Department to continue inspections. For more guidance see "Hazardous Materials Management: A Community's Guide" at www.state.ma.us/dep/brp/dws/files/hazmat.doc .
Does the PWS provide wellhead protection education?	SOME	Currently, the only outreach is through the annual Consumer Confidence Report. Increase residential outreach through bill stuffers, school programs, Drinking Water Week activities, and coordination with local groups. Aim additional efforts at commercial, industrial and municipal uses within the Zone II.

Section 4: Appendices

- A. Protection Recommendations
- B. Regulated Facilities within the Water Supply Protection Area
- C. Table of Tier Classified Oil and/or Hazardous Material Sites within the Water Supply Protection Areas
- D. Additional Documents on Source Protection

For More Information

Contact Anita Wolovick in DEP's Wilmington Office at (978) 661-7768 for more information and assistance on improving current protection measures.

Copies of this report have been provided to the public water supplier, board of health, and the town.

APPENDIX A: DEP PERMITTED FACILITIES WITHIN READING'S WATER SUPPLY PROTECTION AREAS

DEP FACILITY NUMBER	FACILITY NAME	STREET ADDRESS	TOWN	PERMITTED ACTIVITY	ACTIVITY CLASS
32694	MA DEPARTMENT OF PUBLIC WORKS	CAUSEWAY RD	READING	HANDLR	SMALL QUANTITY GENERATOR
32694	MA HIGHWAY READING	CAUSEWAY RD	READING	FULDSP	FUEL DISPENSER
317431	AGFA CORP	55 CONCORD STREET	NORTH READING	HANDLER	LARGE QUANTITY GENERATOR
317431	AGFA CORP	55 CONCORD STREET	NORTH READING	HANDLER	LARGE QUANTITY GENERATOR
251722	BARD MEDISYSTEMS	87 CONCORD ST	NORTH READING	DISCHARGE	BELOW IWW REGULATED THRESHOLDS
251722	BARD MEDISYSTEMS	87 CONCORD ST	NORTH READING	HANDLER	BELOW HW REGULATED THRESHOLDS
251722	BARD MEDISYSYEMS	87 CONCORD ST	NORTH READING	TURA REPORTER	BELOW TUR REGULATED THRESHOLDS
300381	BOBCAT OF BOSTON INC	20 CONCORD STREET	NORTH READING	HANDLER	VERY SMALL QUANTITY GENERATOR
300381	BOBCAT OF BOSTON INC	20 CONCORD STREET	NORTH READING	HANDLER	SMALL QUANTITY GENERATOR - WASTE OIL/PCBS ONLY
300381	BOBCAT OF BOSTON INC	20 CONCORD ST	NORTH READING	FUEL DISPENSER	FUEL DISPENSER
29369	CENTRE TRUCKING SERVICES INC	81 CONCORD ST	NORTH READING	HANDLER	VERY SMALL QUANTITY GENERATOR
134191	DYAR SALES & MACHINERY CO	75 CONCORD ST	NORTH READING	HANDLER	VERY SMALL QUANTITY GENERATOR
134191	DYAR SALES & MACHINERY CO	75 CONCORD ST	NORTH READING	HANDLER	VERY SMALL QUANTITY GENERATOR - WASTE OIL/PCBS ONLY
121254	LILY TRUCK LEASING	84 CONCORD ST	NORTH READING	HANDLER	SMALL QUANTITY GENERATOR
131087	MSM INDUSTRIES INC	60 CONCORD ST	NORTH READING	HANDLER	SMALL QUANTITY GENERATOR
131087	MSM INDUSTRIES INC	60 CONCORD ST	NORTH READING	HANDLER	SMALL QUANTITY GENERATOR - WASTE OIL/PCBS ONLY

DEP FACILITY NUMBER	FACILITY NAME	STREET ADDRESS	TOWN	PERMITTED ACTIVITY	ACTIVITY CLASS
132775	NEW ENGLAND MOTOR FREIGHT INC	90 CONCORD ST	NORTH READING	HANDLER	VERY SMALL QUANTITY GENERATOR
132775	NEW ENGLAND MOTOR FREIGHT INC	90 CONCORD ST	NORTH READING	HANDLER	SMALL QUANTITY GENERATOR - WASTE OIL/PCBS ONLY
226966	PACETTI CORPORATION	4 HALLBERG PARK	NORTH READING	HANDLER	VERY SMALL QUANTITY GENERATOR
321780	TERADYNE INC	500 RIVER PARK	NORTH READING	HANDLER	SMALL QUANTITY GENERATOR
319070	VERIZON MASSACHUSETTS	74 CONCORD ST	NORTH READING	HANDLER	VERY SMALL QUANTITY GENERATOR - WASTE OIL/PCBS ONLY
319070	VERIZON MASSACHUSETTS	74 CONCORD ST	NORTH READING	HANDLER	VERY SMALL QUANTITY GENERATOR
333802	WILLIAMS AND PARTNERS	66 CONCORD STREET	NORTH READING	HANDLER	VERY SMALL QUANTITY GENERATOR
131268	AMETEK AEROSPACE PRODUCTS INC	50 FORDHAM RD	WILMINGTON	HANDLER	LARGE QUANTITY GENERATOR
131268	AMETEK AEROSPACE PRODUCTS INC	50 FORDHAM RD	WILMINGTON	HANDLER	LARGE QUANTITY GENERATOR - WASTE OIL/PCBS ONLY
131268	AMETEK AEROSPACE PRODUCTS INC	50 FORDHAM ROAD	WILMINGTON	SURFACE WATER FACILITY	INDUSTRIAL WASTE WATER SURFACE WATER MINOR
357200	AZORES CORP	260 FORDHAM RD	WILMINGTON	HANDLER	VERY SMALL QUANTITY GENERATOR
26009	DUPONT EI DENEMOURS & CO INC.	1 CORNELL PLACE	WILMINGTON	HANDLER	LARGE QUANTITY GENERATOR
32345	FEDERAL EXPRESS CORP	10 CORNELL PLACE	WILMINGTON	HANDLER	VERY SMALL QUANTITY GENERATOR
32345	FEDERAL EXPRESS CORP	10 CORNELL PLACE	WILMINGTON	HANDLER	SMALL QUANTITY GENERATOR – WASTE ONLY
323173	FISHMAN TRANSDUCERS	340D FORDHAM RD	WILMINGTON	HANDLER	VERY SMALL QUANTITY GENERATOR
323173	FISHMAN TRANSDUCERS	340D FORDHAM RD	WILMINGTON	HANDLER	VERY SMALL QUANTITY GENERATOR - WASTE OIL/PCBS ONLY

DEP FACILITY NUMBER	FACILITY NAME	STREET ADDRESS	TOWN	PERMITTED ACTIVITY	ACTIVITY CLASS
191962	GETOV MACHINE INC	150 WEST STREET	WILMINGTON	HANDLER	SMALL QUANTITY GENERATOR
191962	GETOV MACHINE INC	150 WEST STREET	WILMINGTON	HANDLER	LARGE QUANTITY GENERATOR - WASTE OIL/PCBS ONLY
215608	MARTIN MARIETTA CORP	50 FORDHAM RD	WILMINGTON	HANDLER	LARGE QUANTITY GENERATOR
363566	PACIFIC SCIENTIFIC CORPORATION	110 FORDHAM RD	WILMINGTON	PLANT	BELOW AQ REGULATED THRESHOLDS
357315	TELEPHOTONICS	100 FORDHAM RD	WILMINGTON	HANDLER	SMALL QUANTITY GENERATOR
357315	TELEPHOTONICS	100 FORDHAM RD	WILMINGTON	HANDLER	VERY SMALL QUANTITY GENERATOR - WASTE OIL/PCBS ONLY

UNDERGROUND STORAGE TANKS WITHIN READING'S WATER SUPPLY PROTECTION AREAS

FACILITY NAME	ADDRESS	TOWN	DESCRIPTION	CAPACITY (GAL)	CONTENTS
LOUANIS WATER TREATMENT PLANT	STROUT AVE	READING	MUNICIPAL	4000	FUEL OIL
MASS DPW MAINT DEPOT	CAUSEWAY RD	READING	STATE MAINTENANCE DEPOT	6000	GASOLINE
MASS DPW MAINT DEPOT	CAUSEWAY RD	READING	STATE MAINTENANCE DEPOT	6000	DIESEL
BOBCAT OF BOSTON INC	20 CONCORD ST	NORTH READING	VEHICLE DEALER	3000	GASOLINE
LILY TRUCK LEASING CORP	84 CONCORD ST	NORTH READING	TRUCK/TRANSPORT	10000	DIESEL
LILY TRUCK LEASING CORP	84 CONCORD ST	NORTH READING	TRUCK/TRANSPORT	10000	DIESEL
NEW ENGLAND MOTOR FREIGHT	90 CONCORD ST	NORTH READING	TRUCK/TRANSPORT	10000	DIESEL

FACILITY NAME	ADDRESS	TOWN	DESCRIPTION	CAPACITY (GAL)	CONTENTS
NEW ENGLAND MOTOR FREIGHT	90 CONCORD ST	NORTH READING	TRUCK/TRANSPORT	10000	DIESEL
NEW ENGLAND MOTOR FREIGHT	90 CONCORD ST	NORTH READING	TRUCK/TRANSPORT	8000	WASTE OIL
ROADWAY EXPRESS INC	95 CONCORD ST	NORTH READING	TRUCK/TRANSPORT	8000	DIESEL
ROADWAY EXPRESS INC	95 CONCORD ST	NORTH READING	TRUCK/TRANSPORT	8000	DIESEL
J A MIARA TRANSPORATION	140 WEST ST	WILMINGTON	TRUCK/TRANSPORT	10000	DIESEL
J A MIARA TRANSPORATION	140 WEST ST	WILMINGTON	TRUCK/TRANSPORT	4000	GASOLINE

For more information on underground storage tanks, visit the massachusetts department of fire services web site: <http://www.state.ma.us/dfs/ust/usthome.htm>

Note: this appendix includes only those facilities within the water supply protection area(s) that meet state reporting requirements and report to the appropriate agencies. Additional facilities located within the water supply protection area(s) should be considered in local drinking water source protection planning.

APPENDIX B – Table of Tier Classified Oil and/or Hazardous Material Sites within Reading Water Supply Protection Areas

DEP's datalayer depicting oil and/or hazardous material (OHM) sites is a statewide point data set that contains the approximate location of known sources of contamination that have been both reported and classified under Chapter 21E of the Massachusetts General Laws. Location types presented in the layer include the approximate center of the site, the center of the building on the property where the release occurred, the source of contamination, or the location of an on-site monitoring well. Although this assessment identifies OHM sites near the source of your drinking water, the risks to the source posed by each site may be different. The kind of contaminant and the local geology may have an effect on whether the site poses an actual or potential threat to the source.

The DEP's Chapter 21E program relies on licensed site professionals (LSPs) to oversee cleanups at most sites, while the DEP's Bureau of Waste Site Cleanup (BWSC) program retains oversight at the most serious sites. This privatized program obliges potentially responsible parties and LSPs to comply with DEP regulations (the Massachusetts Contingency Plan – MCP), which require that sites within drinking water source protection areas be cleaned up to drinking water standards.

For more information about the state's OHM site cleanup process to which these sites are subject and how this complements the drinking water protection program, please visit the BWSC web page at <http://www.state.ma.us/dep/bwsc>. You may obtain site -specific information two ways: by using the BWSC Searchable Sites database at <http://www.state.ma.us/dep/bwsc/sitellst.htm>, or you may visit the DEP regional office and review the site file. These files contain more detailed information, including cleanup status, site history, contamination levels, maps, correspondence and investigation reports, however you must call the regional office in order to schedule an appointment to view the file.

The table below contains the list of Tier Classified oil and/or Hazardous Material Release Sites that are located within your drinking water source protection area.

Table 1: Bureau of Waste Site Cleanup Tier Classified Oil and/or Hazardous Material Release Sites (Chapter 21E Sites) - Listed by Release Tracking Number (RTN)

RTN	Release Site Address	Town	Contaminant Type
3-0002804	5 Hallberg Park	North Reading	
3-0000692	60 Concord Street	North Reading	
3-0002363	95 Concord Street	North Reading	Oil
3-0002584	70 Concord Street	North Reading	
3-0017390	80 Concord Street	North Reading	Hazardous Material
3-0013565	Causeway Street/ MA Highway Department	Reading	Oil And Hazardous Material
3-0000625	I-93 Lowell Street	Wilmington	
3-0000518	50 Fordham Road	Wilmington	Oil

For more location information, please see the attached map. The map lists the release sites by Release Tracking Number (RTN).